# Queen's Unibersity

## Course in Banking

LESSONS XV-XVI

Economics



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#### LESSON XV.

#### Labor and the Progressive Employer.

The preceding lesson has set forth some of the ways in which workingmen have attempted to better their conditions, through organized self-help. We may next note some of the policies adopted by progressive employers for improving the conditions under which labor is employed. The motive in the latter case may be an enlightened selfishness, aiming at increased efficiency, or it may be a genuine humanitarian interest in the welfare of the employees, or, as is more usual, it may be a blending of both considerations. Whatever the motive may be, these policies do not look to increasing the workman's share in the control of industry. They are paternalistic, rather than democratic, though the eventual effect may be to lead

the men to desire and to demand such control.

The industrial revolution, with all the advantages it brought in the way of miracle-working machinery and elaborate organization of industry, has its drawbacks, even from the standpoint of production. One drawback was that the new system did not produce trained and skilled workmen, with an all-round grasp of the trade. The apprenticeship system, it has been noted, gradually died out as the increased division of labor and use of automatic machinery made it appear unprofitable. It was assumed that there would be less need for all-round skill, that a few months' experience would give all the training required for the simple and single processes required of each worker. While this is true in the majority of occupations, there remain a very large number of positions in which skill and intelligence and initiative are just as important as ever they were, and in the interest of the employer himself it is desirable to secure a greater degree of individual efficiency.

Again, the industrial revolution involved a weakening of the personal connection between workman and employer, or its complete disappearance. "In ye olden days the master, with all his workmen, sat about a single table, his wife on his left hand, then his children, and then his journeymen, one by one, beginning with the eldest, and ending at the right hand side with the newest and often the youngest apprentice. Today, in many large shops and factories, the employer does not know his employees either by name or by face." We doubtless idealize this earlier system of industry, which had its own serious defects, but this merit of close personal connection it did possess. In the loss of this personal touch one great ele-

ment in efficiency, mutual understanding, esprit de corps, has been sacrificed.

To-day the attempt is being made to replace these two elements of efficiency. The employer, or more and more the state, seeks to give the trade and industrial training desirable. Many employers are also trying to regain the personal note in their relations with their employees, by including in their staff a social secretary or welfare secretary, whose duty it is to keep in close touch with the men and to superintend the various welfare activities undertaken.

Robert Owen, an English cotton manufacturer of a century ago, famous for his social experiments and theories, was once walking through a Lancashire mill with its owner, when the latter remarked: "If my men liked, they could save me £10,000 a year by better work and the avoidance of waste." Owen replied, "Then why don't you pay them £5,000 a year

to do it?"

Later Owen found opportunity to put his theories into practice. He became manager and part owner, in 1800, of large cotton mills at New Lanark, on the Clyde. There were about two thousand people employed, five hundred of whom were children sent in, at the ages of five or six, from the poor-houses and orphan asylums of Edinburgh and Glasgow. The workmen seemed a hopeless lot: there was a prejudice at the time against employment in cotton mills, and the sober honest people of the neighborhood would not seek work in them, and submit to the demoralizing drudgery, long hours and vicious surroundings. Theft, drunkenness and sexual immorality were rife; the body of employees was constantly shifting. Only the efficiency of the wonderful new machines made up for the inefficiency of the men and women and children who operated them.

Owen at once set to work to better their conditions, cleaned up the mills and the workmen's houses, opened stores to sell goods of sound quality at cost price, placed the liquor traffic under strict supervision, and opened the first infant schools in Great Britain. for the pauper children. He devised schemes, some of almost fantastic detail, for checking slackness or theft, and for stimulating good conduct. The results achieved were astonishing; New Lanark became a place of pilgrimage for statesmen and manufacturers from all parts of Britain and of Europe, the Czar of Russia being one of Owen's visitors. Their eports were unanimously favorable. Drunkenness and ille, itimacy were almost unknown; health, plenty and contentment prevailed and the children aroused comment for their quick intelligence and their graceful and unconstrained manners. Not only so, but the business enjoyed great prosperity, paying large profits. The experiment ended

in Owen's withdrawal, due to the greed of some partners, who objected to the philanthropic outlay, and the religious scruples of others, who were offended by Owen's refusal to have denominational theology taught in his schools.

These century-old experiments contain in germ all the

modern efficiency and welfare developments.

The employer seeking to improve the conditions under which his employees work may, as noted above, be chiefly interested in increasing their efficiency as dividend producers, or he may be genuinely sympathetic with their troubles and aspirations, regarding them as individual men and women, not merely as cogs in the industrial machine. These motives are found operating singly or combined in various degrees in the chief forms which this new movement of attention to the human factor has taken:—

1. Changes in the administration and in the method of paying wages.

Profit-sharing.
 Welfare-work.

More and more, employers are coming to recognize the need of bettering the conditions under which their men work. The recognition was slow in coming. The gulf between master and man, created by the Industrial Revolution, made the employer too often ignorant or careless of the workman's lot, and only slowly have agitation and publicity made the conditions clear, and a deepening social sympathy and a widening social conscience led employers to act according to their new Human efficiency received less thought than machine efficiency. The ill effects of fatigue caused by bad air or long hours or depressing surroundings were reclized only as medical science advanced. The employer hesitated to make changes because not certain that he would rear the benefit: improvements in a machine were the owner's but the improved workman might go to another employer. To-day, aside from humanitarian motives. the progressive employer is willing to take chances ir reaping the harvest of efficiency from the seed of velfare work he sows.

#### Methods of Administration and Wage Payment.

In the payment of wages the employer has always endeavored to adopt the system which would most promote efficiency, and workmen and employers both have long studied and differed as to the relative merits of time-wages and piecewages. It is only of late years, however, that the various methods have been scientifically analyzed and labor efficiency made a branch of engineering as important as machine ef-

ficiency.

The usual methods of remuneration are time-wages, or day's work, payment by the hour or day, and piece-wage or payment per unit of work done. The difference between the two systems is not so complete as might seem at first glauce. As a matter of fact there is always a piece basis in time-wages, that is, the employer expects the workman to do a more or less definite minimum of work in the time set, and the employee has a more or less definite maximum of output in mind. Equally so there is a time basis for piece-wages: the employer expects that the units of work will be accomplished within a certain time and the employee expects to be able to earn so

much per hour or per day or per week.

Time-wage is the normal method employed. It is desirable wherever perfection of workmanship is more important than speed, or wherever the quality of the work cannot easily be tested by inspection. It is almost inevitable where it is difficult to count or measure the output, or where the nature of the work done changes frequently. Where it can be applied, and where quality can be inspected or is not the first consideration, employers usually prefer the piece-work system as inducing the maximum of output. Frequently the amount of work done per day has been found to increase from thirty to fifty per cent. when men transfer from a time to a piece basis, with all the gain this implies to the employer through more speedy delivery of work and more economic utilization of the plant. Piecework is favored by unions in some trade where automatic machinery sets the pace, but it is opposed in other cases. objections raised against it are, first, that the employer, seeing how much more per day his men earn than when on timewages, concludes the piece-rate is fixed too high, and nibbles and cuts this rate until in the long run the men are turning out a much larger stint for a wage little if any higher than at the start, and, second, that in some cases there is so little uniformity in the different men's tasks that it is necessary to fix rates individually, thus undermining collective bargaining.

An amendment of the piece-system is the premium-system, widely adopted in recent years. It aims at dividing between workman and employer the gains due to increased effort. Under the day's work plan the immediate gains due to increased effort by the workman go to the employer; under the piece-work plan they go to the workman, until a cut in rates is made, while under the premium plan they are divided. Suppose a piece of work has been done upon the day's work plan

and that it is proposed to change it to the premium plan. The time which it has required is determined and the workman, who is still paid the old day rate, is told that if he will reduce that time he will, in addition to his daily wages, be paid a premium for each hour or part of an hour by which he reduces time, this premium per hour being less than his hourly rate of wages. Assume that he is paid \$3.00 a day and that he produces one piece of a kind in a day of an hours. If he reduces the time by an hour, there will be cross saving of 30 cents, of which, say, ten cents is paid him premium, the remaining twenty going to the employer. Thus wages go up and costs condown simultaneously.

Promium Plan

10

is removed.

8 hours ..... 2.40

7 hours ..... 2.10

	I / Checken	A POSTE		
1.	2.	3.	4. Total	5. Workman's earnings
lime taken.	Wages per piece.	Pre-	work= Col. 2+ Col. 3.	per hour= Col. 4÷ Col. 1.
hours		\$ .00 .10	\$3.00 2.80	\$ .30 .311

.20

.30

.325

.343

2.60

2.40

6 hours ...... 1.80 .40 2.20 .366
5 hours ...... 1.50 .50 2.00 .40
Under this system, it is claimed, the temptation to the employer to cut the rate, if not eliminated greatly lessened, and thus the chief element of friction in the piece-work system

Piece-work and premium system are types of the experiments in better methods of organization which are one form when by the employer's increasing emphasis upon the human factor in his business. Both make for larger output, but the premium system is less open than piece-work to the danger of the rate being cut as the output increases.

The premium system is but one evidence of the greater thought that is being given to methods of payment and administration in their bearing upon efficiency and harmonious working. A further development is that form of business engineering known as scientific management, a recent United States product. Critics declare that the claims of the exponents of scientific management are exaggerated, and that they are simply more skilful advertisers than former managers who have equally sought efficiency. There is a measure of truth in this criticism, but the new policy, in its substitution of careful

and precise investigation for rules of thumb, its study of men's psychology and physical possibilities alike, its more thorough separation of planning and performing, appears to have a valid

claim to the attention it has received.

Scientific management, it is claimed by its advocates, differs radically from the most competent and progressive management under the old system, and also from systematized management. The difference is one in kind, not merely in the degree of competence, or in the existence of progressive as opposed to conservative methods. In the unsystematized business the order is issued from the office to the shop, and the office feel that their entire responsibility ends when they have issued the order to the shop. In the systematized business or manufacture there is a regular routine by which these orders proceed, from the office to the different departments, through to the shipping department, and in many cases they have a proper sequence worked out, so that the method of filling the order is not entirely left to the subordinate. Scientific management comes in when each of those steps has been thoroughly investigated, each of the steps through which the work should proceed, from the point at which it originates to the point where it comes out of the works, and when each of the steps has been investigated by the best expert available. When that has been done, when each of the steps through which the work has progressed has been studied in detail, and a specific, definite route has been laid out, reduced to writing, and returns are sent in to the office to show how this work has progressed each day, from the time it is issued from the office; and when any failure to live up to these instructions is immediately reported to the office, and a proper person who knows how it should be done goes out at once and helps the work along, that is scientific management.

Planning in advance is of the essence of scientific manage-The business engineer makes his plans and specifications covering the process of production before it is entered upon, extending his directions like the mechanical engineer into minute details in order to secure the perfect product. Those engaged in actually performing the work might not be competent to do such planning. The management of the business assumes towards the workmen a wholly new function. Instead of the prevailing "putting it up" to the employee to do his work with such stimulus as may be given through force or inducement, the management assumes the responsibility of enabling the employee to work under the best possible conditions of perfect team-play. It undertakes to instruct him definitely what to do and the best method of doing the particular work. It undertakes to provide him with the best tools, and with machines in the best condition. It undertakes to furnish

him with assistance to perform those parts of the operation

requiring less skill than his own.

The results attained depend, further, on a careful study of each operation with a view to determining, in the first place, what time should normally be taken in performing the operation, and, secondly, whether it can be performed in a better manner than has hitherto been practised. No assumption is made that the time hitherto employed was necessarily the proper time, nor that the way in which it has been performed is the best way. The ordinary man, it is urged, whether mechanic or laborer, if left to himself, seldom performs any operation in the manner most economical either of time or labor, and it has been conclusively proven that even on ordinary day work a decided advantage can be gained by giving men instructions as to how to perform the work they are set to do. It is perfectly well known that nearly every operation can be, and the actual work is, performed in a number of different ways, and it is self-evident that all of these ways are not equally efficient.

Some of the more notable illustrations of the successful application of these principles by Taylor and other efficiency

engineers are as follows:-

(a) When applied to the simple operation of loading a railroad car with pig-on by hand, the performance of the individual worker increased from 12½ to 47 tons a day.

(b) When applied to shovelling coal, scientific manage-

ment doubled or trebled the performance of the shoveller.

(c) When applied to machine-shop work, it developed, in

certain operations, increases in production ranging from 400 to 1,800 per cent.

(d) When applied to bricklaying the day's accomplish-

ment rose from 1,000 to 2,700 bricks.

From the workman's point of view, scientific management has been regarded as a doubtful friend. Yet strong claims are made for it in this connection. Under scientific management, it is claimed, the employee is enabled to earn, without greater strain upon his vitality, from 25 to 60 per cent. more than under the old system. The larger wages are made possible by larger production: but this gain in production is not attained by "speeding-up." It comes largely from removing the obstacles to production which annoy and exhaust the workman-obstacles for which he is not, or should not be made, responsible. The management sees to it that his machine is always in perfect order. The management sees to it that he is always supplied with the necessary materials. The management sees to it that the work comes to him at proper times. with proper instructions and in proper condition. The management sees to it that he is shown the best possible way of doing the job; that is, the way which takes least time, which takes least effort, and which produces the best results. Relieved of every unnecessary effort, of every unnecessary interruption and annoyance, the worker is enabled, without greater

strain, greatly to increase his output.

Such are the modest claims advanced. Even if all these claims were borne out by experience, and scientific management did not degenerate into more skilful and more cold-blooded slave-driving, it is doubtful whether it is well to make the workman too solely a machine, to take away all initiative, and separate planning and doing, thinking and acting, in the extreme fashion some advocate. However, when discount of its sweeping claims is made, and when care is taken to enlist the co-operation and initiative of the men as well as of the perfect expert, the new movement holds much promise.

Scientific management is the latest word in the organization of labor to secure efficiency. The essence of the policy lies in the careful study by experts of the methods and motions required, the issuing of detailed instruction in advance to guide the workmen, and the constant checking and analysis of results. It is a question whether it does not carry specialization, the distinction between thinking and doing, too far.

#### Profit Sharing.

In the methods of remuneration just reviewed, the motive of increasing efficiency for the employer's own benefit is the dominating one. In profit-sharing, also, this motive is usually present, but it is not merely increased output per day or reduced labor-cost per unit that is aimed at, but a new loyalty and sense of common interest, which will work out for the employer's gain more indirectly. In addition, the philanthropic motive of bettering the workman's lot, of giving not only a higher remuneration but a deeper interest and greater self-respect than the wage-system can produce, is usually present.

Profit-sharing has been defined by the International Congress on Profit-Sharing, which met in Paris in 1889, as "an agreement, freely entered into, by which the employee, in addition to his wages, receives a share, fixed in advance, of the profits of the establishment." The employer remains in full charge of the management. At the close of the year, when the profits can be ascertained, some definite proportion is dis-

tributed among the employees.

, The methods of profit-sharing are still more varied than the motives, but the chief forms are three: cash payments at the close of the year; deferred participation; and a stock bonus.

In the experiments in England the cash bonus has been most frequent; in France, the deferred participation, and in the United States, the cash bonus or the stock bonus. ferred participation usually takes the form of an annual bonus paid into a provident fund for the benefit of the whole body of employees, or credited directly to the individual workman: in either case the fund is used for old age or sickness pensions. This plan is especially popular in France, where the idea of thrift has deep root, an! where employment is stable; the average workingman on this continent has neither the patience nor the permanence in a single establishment to make such a plan appeal to him, especially if the bonus is to be forfeited on leaving the establishment. When stock in the company is given, it may either be given outright or offered at a reduced rate, to be paid for on instalments, as has been done by the United States Steel Company. Sometimes, as in the Briggs and South Metropolitan Gas Company experiments, the giving of a cash bonus is made conditional, in whole or in part, upon the workman purchasing a certain number of shares of stock, on which the ordinary dividend is paid.

In calculating the profits to be shared, it is usual to deduct all working expenses, rents, wages, salaries, taxes, from the gross revenue, and usually a minimum rate is allowed on the capital employed and a sum set aside for depreciation. The profit remaining is shared in some fixed proportion, sometimes a certain per cent., sometimes the same rate on the wage-roll as on the capital invested, and in other ways. While fixed, the rate may not be made known to the workmen, as it is sometimes not advisable to have the rate of profit known to competitors: in such cases it is usual to communicate the proposal to a public accountant, who certifies what is due the workmen as their share. A minimum term of service may be required to qualify for participation. Sometimes, also, non-membership

in a trade union is made a condition.

Many rosy pictures have been painted of the transformations to be effected by profit-sharing: efficiency increased, zeal and content developed, both employer and employed better off. There are some notable instances of success. The father of profit-sharing was undoubtedly Leclaire, a Paris house-painter, who, when he took up the idea in 1842, employed three hundred men, paid by the hour. Like Owen, he realized the possibilities of large economies if the interest of the workmen could be enlisted: he calculated that if he could induce each of these men to work with greater zeal and intelligence, to waste less material and be more careful of the tools, he would effect a saving of \$15,000 a year. Accordingly he offered his employees a share of the additional profits he expected to receive, with remarkably successful results. For over twenty years cash

profits were paid, in proportion to wages, but in 1869 it was arranged to divide the profits among the managing partners, a workman's provident society, and the individual workmen. The business is now largely controlled by a committee of the workmen, so that the experiment really verges on industrial partnership; it has little of paternalism about it.

The Metropolitan Gas Company, of London, England, which employs nearly ten thousand men, adopted the plan to avert a threatened strike. Each workman, as a condition of sharing profits, is required to sign a contract to serve the company for from three to twelve months, and not to belong to a union: the different agreements expire at different dates, so that a simultaneous walk-out is not possible. The employees are shareholders to the extent of over a hundred thousand pounds, and are given three representatives on the board of directors.

The Proctor and Gamble Company, of Cleveland (Ivory Soap), introduced profit-sharing in 1887 to secure greater permanence in the working force. The plan as at first adopted provided for payment of a reasonable salary to each member of the firm, and then a division of the net profits between the firm and the employees in the proportion which the pay-roll bore to the total cost of roduction. In 1903 it was provided that, in order to receive a share in profits, an employee must own common stock to an amount equal to one year's wages: the company offered to buy this amount for any employee, to be paid for by instalments, the dividends being also credited on the purchase price. Most of the employees took advantage of the offer. It is claimed that the saving in lessened waste, lessened superintendence, and absence of strikes, has reduced the labor cost of manufacturing by 20 per cent.

Popular interest in profit-sharing has been much increased by the recent spectacular experiment of Henry Ford, the Detroit automobile manufacturer. While this plan differs from profit-sharing as ordinarily conceived, and while it is hardly likely that Mr. Ford will find many imitators on his own scale, the experiment has so many features of interest that it is worth noting in detail. The following extracts contain Mr. Ford's evidence before the United States Commission on Industrial Relations, in March, 1915.

Question 1.—Give a description of the profit-sharing plan of the Ford Motor Company, and then state the purposes aimed at in establishing a profit-sharing plan; its results on efficiency of men, its results on the character and steadiness of men, its results as regards citizenship and general interest in the advance of the community.

Every man working for the Ford Motor Company is first entitled to his just wages as such, depending upon efficiency and responsibility, these wages being about 15 per cent. above the usual market wage for the service in question. everyone who is eligible is entitled to a certain profit. minimum daily income under this pian, wages plus profit, is \$5. The hourly profit- haring rate, added to wages, is based on the wage rate, and so arranged or graduated as to give those receiving the lowest hourly rate the largest proportion of profits.

For example, a man receiving 34 cents an hour has a profit of 281/2 cents an hour in addition and a total daily income of \$5, whereas men receiving 54 cents an hour wages. have a profit-sharing rate of 21 cents an hour, with a totadaily income of \$6. The working-day is eight hours instead

of nine as before; the week, forty-eight hours.

Wages and profits are paid every two weeks in currency. Those qualified for participation in profits are of unree classes:

(1) Married men living with and taking good care of

their families.

(2) Single men over twenty-two years of age who are of proven, thrifty habits.

(3) Young men under twenty-two years of age, and wo-

men, the sole support of some next of kin.

The person must be in the employment of the company six months before he can participate in profits, which rule serves to deter men from leaving other steady jobs. A record of facts is made in the case of each individual and every employe qualifying under the above, able to use the money constructively, for the good of self, dependents and the community in general, is awarded a share according to schedule. Wages are paid according to skill, and skill subdivided into degrees of skill. The company has but eight rates of pay operative in the shop or on its hourly wage pay-roll. A separate rate of wages applies to each skill rating. An employee may know the reward of his increased efficie, cy and development and of all the possibilities and probabilities for advancement with the company at the time of entering its employ.

The company maintains a corps of forty men, good judges of human nature, who explain opportunity, teach American ways and customs, English language, duties of citizenship; who counsel and help the unsophisticated employees to obtain and maintain comfortable, congenial, and sanitary living conditions and who also exercise the necessary vigilance to prevent, as far as possible, human frailty from falling into habits or practice detrimental to substantial progress in life.

whole effort of this corps is to point men to life and make them

discontented with a mere living.

You ask our purpose in establishing this plan. Our first purpose was substantial justice to our co-workers without whom we could have accomplished nothing. We had had great success, and in fact we desired no greater success from a niere financial point of view. For a long period we had been contemplating some plan, but every one suggested seems fraught with objections. We finally decided to go forward with this one and feel our way along to a position of substantial justice. We do not regard it as in any sense a gift or a charity, but only due reward for service.

Prior to the mauguration of the Ford Motor Company's profit-sharing plan, the company was entirely satisfied with the individual and collective output and efficiency of its men. there was no thought of betterment in this direction, no measure of economic benefit made in anticipation, no desire for publicity or other gain to the company incorporated into the plan or considered with reference to it.

The object was simply to better the financial and moral status of the men. No man is influenced to change his mode of living, his habits or character in order to qualify under the profit-sharing plan if he does not willingly so elect.

Whereas at the start, 60 per cent. of the men were receiving a share of the profits, six months later 75 per cent. of the men were enrolled as participants; and at the end of the first year,  $871/_2$  per cent. of the entire force were participating, representing practically all of the men past twenty-two years of age, with very few exceptions.

The increased efficiency of the men under the plan has been from 15 to 20 per cent. with reference to work produced, which is further emphasized when you consider that the improvement was made in an eight-hour day versus the previous time of a nine-hour day.

Daily absentees from work have decreased from a total equivalent to 10 per cent. of the working force, under old conditions, to 3/10 of 1 per cent. under the profit-sharing plan.

The number of men leaving the employ of the company since the profit-sharing plan started, in comparison with the year previous is shown below:

			Di	scharged.	Quitting.	5-day Men.
March,	1913	 		1,276	870	5.156
March.	1914	 		166	115	166

Five-day men are the "floaters," so called, who leave without explanation or notice.

Fear and worry in the struggle for livelihood, the struggle to provide for home and dependents with the dread of what might happen if the job is lost have practically been eliminated. No man is discharged from the service of the company until he has been proved utterly unfit from every standpoint. If he fails to make good in one department, the foreman of that department sends him to the clearing house, and he is given repeated trials, if necessary until he makes good, or it is proven that he does not want to succeed. A recent ruling of the company requires the approval of one of four men before the man can be finally dismissed. Of the four, two are respectively the president and the vice-president of the company.

Bank accounts show an increase during the first six months of 130 per cent. Life insurance carried 86 per cent. Value of homes owned outright, 87 per cent. Value of lots owned outright, 86 per cent. This remarkable showing refers only to

such employees as are on the profit-sharing basis.

Careful medical survey reveals a substantial improvement in physical attributes. Upwards of 200 men have been influenced and helped to obtain citizenship in the United States.

A carefully prepared map of the city shows that 8,000 families have changed their place of residence since the plan was started, and a study of the districts into which they have moved, and from which they came, shows that the migration has been from poor and squalid to healthy, sanitary quarters, with environment conducive to health, happiness and comfort.

Results on character and steadiness of men may perhaps be best measured and more thoroughly understood by agencies

outside the company.

Police justices say whereas Ford employees, recognized by their badges, were almost daily seen in the prisoners' dock, up to a year ago, since January, 1914, they have been noticeably absent and are rarely among the unfortunates brought to justice.

From one of the largest Polish Catholic parishes in the city, the father writes: "The work of the Ford Motor Co. has been of tremendous benefit to my people. Heavy drinking is characteristic of the Poles, I know. Your work, however, has resulted in sobriety now being the rule rather than the exception in my parish."

The company has organized a school wherein the non-English-speaking are taught the rudiments of the English language, to speak, to read, and to write it. At the start, teachers were employed who had made school work their vocation.

After about three months' operation, the school grew from about 200 members to approximately 1,100, and the paid teachers were replaced by volunteers from the Ford Motor Company, some of whom had had experience in school work, but the

most of them are foremen, sub-foremen, and men from the ranks, and are simply enthusiastic individuals eager to help along a good work and better the conditions of their brother men, both as an expression of gratitude for what their employer has done for them and to seize an opportunity for self-enlargement which the work offered.

Question 2.—What reasons did the Ford Company have for assuming so large a measure of responsibility, not only for the labor conditions in their plants, but also for the social and moral surroundings of employees?

The knowledge that market rates of wages were not sufficient for men to properly care for self and dependents and that the environment in which its employees were thus made to live, gave rise to mental anxiety and a physical condition that made it utterly impossible for the human agency to deliver all of the effort that it was capable of in fulfilling the best and larger functions for which it was designed at work, at home, and in the community.

The company also had the courage to seize an opportunity for breaking away from old-time habits and customs that were possibly applicable to other periods. The institutions of a new order, treating men like men in man fashion, has brought out much of human salvage and proved that barriers between employers and employees thought to exist, and which often do

exist, can be largely removed.

A large proportion of our employees were foreign born, many of them recent arrivals not used to American habits and surroundings. Very few, if any, resented our guiding them into better conditions, into habits of thrift, saving, sobriety and improved moral and social conditions. No coercion is laid upon any employee, but if he is not living a sober life, or is neglecting his duties as a father or husband, and he persists in such course, he cannot be an associate in our business.

Question 3.—What has experience shown regarding the extent to which the character and social conditions of employees are the result of the conditions under which they are employed, including wages, hours of labor, general physical surroundings, and treatment by officials, superintendents and foremen?

No man can bring up a family and hope to own a home on the ordinary rate of wages.

I do not think that any man can do good work mentally and physically for more than eight hours a day.

In my judgment the other factors are not so very important.

Question 4.—Is it desirable for a corporation to assume so large a measure of control of employees as the Ford Company has done?

We do not undertake to say what corporations should do in general, but if employers of labor—we mean the men themselves at the head of these enterprises—have a genuine, sincere and active interest in the improvement of the conditions of labor and the heartfelt personal interest in the welfare of their employees, no conditions that are irksome or distasteful will be laid upon the men.

Theoretically, some persons may argue that we have no right to inquire how a man lives at home, so long as he does his work at the factory; but we are talking of conditions, not of theories. Our experience leads us to conclude, beyond doubt, that the interest taken in employees as to their individual welfare is most desirable from every standpoint, not only of that of the employee and his family, but of the business itself.

The ever-increasing interest developed in our plan by other employers of labor and the individual expressions of the men themselves, which we have taken great pains to learn from disinterested sources, further prove the correctness of our views.

Question 5.—To what extent would it be desirable, in addition to giving employees a share of the profits in a corporation, to give them also an insight into the operations of the Company and a voice in the determination of working conditions?

If by this question is meant a voice in determining the policies of the company in working out its success, we say:

No man wants to be burdened with the care and responsibility of deciding things.

Great freedom of speech and expression of ideas exist in our work, and a great many valuable suggestions are gained thereby. Individually or collectively, men may raise their voices with suggestions, and they are always heard.

If, on the other hand, what is meant is a voice in fixing the personal physical surroundings of the employees, we should say most decidedly, the employees should have a voice, and their opinions and wishes should be consulted.

So far as the Ford Motor Company's actual experience is concerned, these surroundings have been as judged by modern and existing standards, so ideal in character that there have never been any complaints from the employees, and we believe entire satisfaction has been the rule.

Question 6.—As a result of your observations and experience, what is considered to be the effect of the growth of large

corporations and the centralizing of their control on the condition of labor in the United States?

Any manufacturing institution that is successfully making a single product, should increase the business and its plant, and make more work to employ more men.

We cannot expect a man to give us his best efforts when he

is in debt and has not enough to keep his family on.

If corporations are overcapitalized, they must necessarily oppress labor to make a showing. But if they grow from small beginnings, naturally, and stick to one legitimate product, balanced conditions are bound to follow.

The sooner men can be taught that labor is just as much of an asset, and more, than machinery and buildings, the

sooner labor will be properly recognized.

In my judgment, mere bigness is no objection if corporations are not overcapitalized.

Question 7.—What is your attitude towards the accumulation and perpetuation of large fortunes?

We believe it is better, wiser, and more just to make many men comfortable than to make a few very rich.

Question 8.—As a result of your observations and experience, do you consider that private philanthropies can deal adequately or effectively with social condition?

They may, and probably do, do some good. Of course, they are not adequate. But my idea is justice, not charity. I have very little use for charities or philanthropies as such. My idea is aid men to help themselves. Nearly all are willing to work for adequate reward. We ! Je all kinds of cripples in our employ, and they are making good. We have a great many who have been in prison and who are outcasts from society. Everyone of them is making a good showing and is gaining in self-respect and strength of character.

We will guarantee to take every man out of Sing Sing

and make a man of him."

While, however, these and other instances of success may be cited, profit-sharing has not yet had the uniform success or the wide extension its advocates hoped. On the employer's side there has often been disappointment; the expected increase in productivity has not come about, or has not been maintained. Other employers have hesitated to adopt the plan, not wishing to disclose profits, or believing that men should not share in the profits unless they also share in the losses. The workman, again, has not welcomed the proposal with the alacrity one might have expected. The connection between individual effort and individual gain is not as close as under the

various gain-sharing or premium systems of wage-payment reviewed above. The sharing does not come until the end of the year, and even if the workmen, spurred on by the prospect of profits, increase their output, there is always the possibility that bad management on the employer's part or a trade depression may make the expected profits vanish. By directly or indirectly weakening trade union organization, the system takes from the workman an instrument which he often regards as his chief and indispensable aid. The very introduction of profit-sharing may increase rather than lessen the possibility of disputes. "These schemes," declares a Scotch employer, Mr. Denny, "contain the germ of the old dispute of how much the workman is to get and how much the master, and the contest over this is simply transferred from the trade in general to the firm in particular." There is always room for suspicion as to the bookkeeping methods followed, and particularly as the system became general, workmen would be more and more inclined to look the gift-horse in the mouth. In perhaps the most famous English experiment, that of Briggs Colliery, this was one of the rocks on which the scheme was wrecked. The plan was introduced in 1865: the men were to receive onehalf the net profits remaining after the shareholders had been given fifteen per cent. In 1873 the fund available for profitsharing was decreased, because £30,000 out of earnings was invested in another mine, the shareholders getting new shares, but the employees losing their £15,000 of the bonus. Dissatisfaction was also expressed over the unusually large amount set aside for depreciation and reserve. When, therefore, in the following year, Messrs, Briggs, in common with other collieryowners, announced a cut in wages on account of the depression in trade, the men struck and the shareholders put an end to the experiment.

The causes of cessation of certain profit-sharing schemes in the United Kingdom have been thus tabulated by the Board of Trade:—

No. of
Causes of cessation— Cases.
Death of employer 2
Job finished
Enterprise abandoned
Liquidation or dissolution 12
Changes in, or transfer of business 3
Losses or want of success
Diminution of profits
Apathy of employees 5
Disputes with employees
Dissatisfaction of employers with results 18
Grant of shorter hours 1

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Special cir	cum	star	ice	2.5							۰						8			0	0	 0	p	0 1			
Cause not	kno	wn	0. (		0						0	0		0 1	0 0		0			٠	0	 0					5
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Total												٠		0 (		á		0 8	0 0				0	0 1	, ,	 0	73

There seems no likelihood, then, that profit-sharing will become a universal solution of the labor-problem, though here and there, with an enthusiastic employer or other favoring

circumstances, success will continue to be scored.

Sliding Scale. A method of making wages share in the profits of ses of the industry as a whole, rather than in the profits or losses of the special establishment, is that employed in the mining industry, where it is often arranged to make wages vary with the price of coal or other minerals. A certain wage is agreed upon as standard, and every fluctuation in price above or below that sum, on the average of a stated period, will be followed by a rise or a cut in that standard wage. The system is a fair one from many points of view, but difficulties in its application to industries where the output is not uniform and standardized have prevented it spreading.

Profit-sharing has scored some notable successes, but has not been adopted as widely as its advocates hoped. The connection between increased exertion by the individual workman and increased reward by a share of the total profits is usually not close enough or not sufficiently appreciated to ensure increased efficiency. Many workmen prefer a definite and permanent increase in wages rather than a fluctuating share in profits, given as a favor.

#### Welfare Work.

In the third form of employers' activities, welfare work, the philanthropic rather than the efficiency motive predominates. Yet the efficiency motive is not wenting, and more and more as experience of the results achieved accumulates, it is coming to be seen that welfare work is justifiable on purely financial grounds. The philanthropist, becoming more scientific in his methods, and the business man, becoming more enlightened in his selfishness, meet on common ground in welfare work. Efficiency is seen to be more than a matter of mechanical organization: it is a question of human capacity, of alertness and interest and vigor.

Welfare work, or industrial betterment, as some employers prefer to call it, includes the improvement of the sanitary

conditions of the factory or shop, provision for the greater attractiveness of the surroundings or the comfort of the employees, facilities for education or recreation, and the betterment of the home environment.

In Great Britain welfare work has largely taken the form of building model villages in connection with great factories. Perhaps the first model village was that of Bessbrook, near Newry, in Ireland, built by Messrs. Richardson in 1846 for the 2,500 workers in their linen mills. It included a hall and a library and the houses were a great advance on the customary hovels: it has, however, been somewhat neglected by the later managers. Saltaire, built near Bradford seven years later, by Sir Thomas Salt, for the 4,000 workers in his woollen mills, was a model village in its day, though its treeless, rectangular streets do not suit modern ideals: houses with three or four rooms and a small yard can be had for four shillings a week.

A marked advance came in the nineties, when the Quaker cocoa manufacturer, George Cadbury, built the famous village of Bourneville, near Birmingham. In 1900 he gave nearly 500 acres of land to the Bourneville Village Trust, to be administered in perpetuity for the provision of improved dwellings and open spaces: factories were not to occupy more than onefifteenth of the area. The cottages are semi-detached, with a certain general harmony in design but much variety in detail: most of those built lately have a living-room, three or four bedrooms, bathroom and scullery; they are well-finished with attractive fireplaces. None are now sold, but are leased at a rental which is supposed to bring in four per cent. on the capital invested: rents range from six to thirteen shillings a week. The roads are winding and picturesque. Dwellings can be built on only one-fourth of a lot, ar ! one-tenth of the land must be used for parks and recreation arounds. The public buildings include a hall, with picture-gallery and library, a bath-house, and kindergarten. Near the factory there are a twelve-acre recreation ground for girls and a fourteen-acre ground for boys, each equipped with gymnasium, swimmingbath, tennis court, cricket and grass-hockey grounds.

Port Sunlight, built by Lever Brothers, soap manufacturers, near Birkenhead. England, is another model village. The village has an attractive park, tree-lined and boulevarded streets. Besides schools and churches there are public halls, a gymnasium, public bath, library and recreation grounds. Dining rooms seating fifteen hundred give food at cost. The cottages are built of half-timber design, and well fitted with modern conveniences. They gent at five shillings a week or sightly more, this sum covering only repairs and one per cent. to provide a sinking fund. The outlay to the firm in interest

is about £10,000 a year, but this is considered to be more

than repaid in the quality and energy of the workers.

In the United States and Canada there are as yet no model villages to compare with Bourneville and Port Sunlight, but some interesting experiments have been made. Pullman, built in the early eighties ten miles from Chicago, by the Pullman Car Company, was a great contrast to the sordid and slovenly shacks which surrounded so many of the manufacturing plants of that day. Its tree-planted streets, with lawns on each side, its two-story brick houses, not artistic in appearance, but comfortable and clean, with small gardens attached, its open square, its stores, theatre, library and schools, gave promise of a new era in America. The promise was shortlived. Many of the workmen resented the paternalism that was a part of the experiment, and when in the depression of 1894 the company cut wages twenty-five per cent., but did not cut rents, and when some employees for two weeks' work received in cheques from four cents to one dollar over and above their rent, a strike broke out which rapidly spread to the railways, and proved the most disastrous and violent single strike in the country up to that time. Pullman is now part of sprawling Chicago, and is not a model city, though perhaps better than its neighbors.

A more successful experiment is that carried on at Leclaire, in Illinois, near St. Louis. founded by N. O. Nelson, dealer in plumbers' supplies. It differs in being less paternalistic. Mr. Nelson is a disciple of Tolstoy, and believes in exam-

ple rather than compulsion or overmuch exhortation.

In 1886 he adopted a profit-sharing scheme based on the experiences of Godin and Leclaire, giving the men the same rate of profit on their wages as was given the owners on their capital, first in cash, and later in shares. In 1890 a new departure was made, which may best be described in his own words:—

"Prior to 1890 I had become impressed with the evil conditions of city life and the impossibility of doing anything more with profit-sharing than an increase of the cash payments. Believing in the old adage that God made the country and man made the town, and having rather more confidence in the workmanship of the former than of the latter, I secured for my company, in the spring of 1890, a tract of 125 acres of land, situated on the high and rolling lands of Illinois, 18 miles northeast of St. Louis, adjoining the county town of Edwards-ville. Here we began to build factories, at the same time laying out a portion of the acreage as a park village. We laid out winding roads which we have since paved with that most excellent material, coal cinders. We planted trees and laid sidewalks along these roads. We built a bowling alley and billiard

room, a club-house for single men, with a room for evening gatherings, and then started building cottages of from three to six rooms to sell to any employees who wanted to buy. We provided our own electric light for factory and village use, and also water. We kept building more factories and more houses until 1894, when the dull times overtook us and we had to wait a while. We built a greenhouse to provide our own flowers for the public grounds and for giving away to those who would set them out in their yards. Payments on houses were made at the equivalent of city rents. Quite a number of them have been entirely paid for. There is about one-third of an acre of ground for each house, on which flowers and fruit trees and vegetables are planted. We provided lawn mowers for everybody's use. Anyone who wants more garden room than he has on his own lot can have all he wants already plowed in the adjacent farm. We have a lecture and dance hall, 40 by 60 feet, which has sliding partitions, so that we make out of it a schoolhouse with one large and two medium-sized rooms. There are a kindergarten and primary school, a dancing class, and two or three reading clubs among the children. From the beginning we have had a lecture course every winter. Among our lecturers have been Edward Everett Hale, Prof. John Fiske, Dr. George D. Herron, and Mayor Jones. We have musicales and sometimes dramatic performances. The workmen are organized into bowling clubs, which occupy the bowling alleys every night throughout the winter and most of the time during the summer. Our baseball campus is occupied every Saturday afternoon and Sundays by the home and visiting clubs. We have several tennis courts and two large skating ponds. Every house has running water and electric light in it. We have no political organization. We have a school and library association which looks after school and library and public grounds. There is no boss in any form. No resident has ever been asked to cut his grass or go to church or keep sober; and, mainly, I think, for that reason, there has never been a fight or a drunk or any interference with the neighbor. The people of Edwardsville are welcomed to all our attractions, and they use them cordially and freely. Because our yards are pretty, our houses and people neat, and our roads kept to perfection, they come to Leclaire to do their driving and wheeling and promenading. The making of an attractive village is really very simple. It only needs the opportunity, and then let people alone. At the start scarcely any of our people made any gardens; scarcely any planted flowers. They did not know how to do it nor care for it. By infectious example they now all have gardens and handsome yards. For three years I have lived in the centre of the village with my own family and my daughter's family. We all agree that we never had better neighbors than the factory workmen. My unmarried daughter teaches dancing to about 25 girls and boys, ranging in age from seven to sixteen. She has two reading clubs and a sewing class. No more intelligent or better behaved children could be found in the West End of St. Louis or Murray Hill in New York or Beacon street, Boston. I have not learned of a single instance in which a family wanted to leave Leclaire. I am perfectly at home with the children, and I know they are enthusiastically fond and proud of their home. I regard Leclaire as the most important part of our profit-sharing venture."

The value in terms of life and death of such improvements is clearly brought out by the following table, which shows the death-rate per thousand in certain English garden cities and model villages, as compared with the rate in indus-

trial centres of the older type:

res of the order cype.	
Hampstead Garden Suburb	4.2
Hampstead Garden Sassa	4.8
Letchworth	5.7
Bourneville	
	8.1
Port Sunlight	12.35
Bournemouth (health resort)	10 08
To all and any	20100
* *	MR O FCF
Liverpool	21.6
Oldham	25.0
Oldham Bethnal Green, London	20.0
Detiline.	

Of course, it must be remembered that to some extent

the persons living in the garden city are selected risks.

Typical of the welfare work more directly connected with the factory are the pioneer activities of the National Cash Register Company at Dayton, Ohio. The grounds are attractive, with lawns and shrubbery, and the works light and airy. Everything is kept spotlessly clean by a large corps of uniformed janitors; in the lavatories free towels and soap are provided, and employees may take a half-hour off each week for a shower-bath. In every building where women are employed there is a cosy rest-room, with piano, easy chairs, and flowers. Twice a day the women are given a ten-minute recess. They are provided with freshly laundered aprons and sleevelets twice a week. Special attention is given health. All employees are examined on admission; a hygiene department is adequately equipped, with nurses in constant attendance, and There is a library of 26,000 a physician calling regularly. volumes, fiction, technical and general works, loaned at a cent a week, and paying for itself. An apprenticeship system with compulsory night school attendance has recently been started. Prizes are offered for suggestions how to improve the business, on either the technical or the social side. A club-house, with a spacious auditorium, classes, dancing, is under the charge of a men's club. A voluntary benefit club was started, now self-sustaining, giving relief to members in case of sickness or injury. For the boys there is a Boys' Garden Company, incorporated; the stockholders are boys from ten to fifteen years of age. Each boy is given a plot of 10 x 100 feet to cultivate under the direction of an expert gardener, and also his tools. The course in gardening covers two years; two hours a day is required of each boy from March to November 1st. The produce of the gardens is sold the officers' lunch-room, and great stress is laid on the exact keeping of accounts. Other details are in keeping.

Sometimes welfare work is inspired by a desire for advertising, sometimes by a desire to break up a union, but in the great majority of cases it is doubtless motived by sincere sympathy with the aspirations of the workers and by a progressive recognition of the value of hygienic and attractive surroundings in increasing self-respect, interest, health, and

every other element in efficiency.

Welfare work, or industrial betterment, begun as a humanitarian policy, is continuing as a business proposition. Alike in the model villages built by English employers and in the model factories of American employers the physical surroundings essential for health and interest and vigor are being secured. Many of the improvements thus effected by progressive and pioneering employers will doubtless in time be enforced upon all employers by the state, but other instances go far beyond the minimum that can be thus required; they are individual and flexible provisions which the rigid and levelling power of the state cannot secure.

### Questions for Review.

1. What were the advantages brought by the industrial revolution? What were some of the drawbacks? Were these drawbacks entirely unnoted at the time? What attempt did Owen make to remedy them, and with what success?

2. What is the difference between day's work and piecework? In what cases is each advantageous to the employer? What objections are sometimes raised by workmen against the piece-work system? Distinguish between the premium system and piece-work.

3. What is scientific management? Wherein does it differ from progressive methods of the older type? In what indus-

tries will there be greatest room for it?

4. Define profit-sharing. Does it give the workmer a greater share in the management of the business? What forms does it take? What are its strong points? Why has it not been more widely adopted? What is the difference between profitsharing, in the strict sense, and the sliding-scale plan?

5. What is the nature of welfare work. Is it an efficiency policy or an outcome of humanitarian feelings, or an advertising dodge? What model village experiments have been carried on in the United Kingdom? Why fewer here? What form does

welfare work on this continent usually assume?

## Questions for Written Answer.

- 1. Answer one of the above Review questions.
- 2. Discuss the Ford profit-sharing scheme.
- 3. Describe any Canadian experiment in profit-sharing or welfare work with which you are familiar.
- 4. What difficulties face the employer who undertakes welfare work of the forms described?
  - 5. Have you any questions?

#### LESSON XVI.

#### The State and Labor.

Perhaps not more important than the means of bettering working conditions already considered-organized self-help and employers' efforts—but certainly more in the public eye, is the intervention of the state. Not a year passes in any industrial country without some new law being adopted in the interest of labor. Old lands like the United Kingdom and new lands like Australia vie in experimenting with the most radical legislation. The experiments undertaken in one country, if successful, or even before success can be tested, are copied elsewhere,

and the movement becomes international.

This flood of labor legislation is viewed with very different eyes by the anarchist who opposes all government intervention and the socialist who wishes the government to control or operate all industry, by the employer who wishes to be let alone and the workman who feels powerless against the forces of wealth and organization. Whether or not this increasing intervention by the state is a step towards socialism, socialism on the instalment plan, as is charged by some who fear and claimed by some who hope for the coming of the socialist commonwealth, will be discussed in the following lesson. Here, some of the advantages and disadvantages of state intervention in general may be taken up briefly, as an introduction to a survey of the particular forms taken by this intervention.

State intervention in the interest of labor, it is urged, is essential for the benefit not only of the workmen themselves, but of the whole community. It is in the interest of employers that labor should be efficient, that the machinery of flesh and blood should be as well cared for as the machinery of iron and steel. It is in the interest of the country as a whole that the mass of the people should be prosperous and

contented, united in common and national aspirations.

The form and degree of state intervention necessary to secure these various ends will vary with every change in industrial organization and social relations. A man may be murdered by poisonous gases in a shop as readily as by a footpad with a pistol. The crippling and stunting a child's mind and body by premature toil may be as serious an injury as would be inflicted by a reckless joy-riding motorist dashing into a children's playground. The strength of the nation may be as seriously threatened by the employment of mothers in a factory while their children are uncared for at home as by invasion and slaughter by armed hordes. If, therefore, the state recognizes the need of protecting its citizens against the highwayman, the reckless driver, the invading enemy, it cannot refuse to deal with the equally serious dangers which

develop in our modern industrial life.

Some difficulties may be dealt with by the individual himself, but only the state, it is further urged, can deal with the minute and technical questions of safety appliances, or ventilation requirements, or accident compensation. No individual workman seeking employment can make the alteration of this or that factory arrangement a condition of his taking And as for trade union organization and collective bargaining, they fail to aid those who most need help, those too young or too poorly paid or too lacking in energy and initiative to organize themselves. Even where a beginning has been made or a considerable success has been achieved by organized effort of employees or by voluntary concessions of enlightened employers, the intervention of the state may be necessary to clinch the gains made, to make the better conditions universal and prevent the more backward employers gaining at the expense of their more sympathetic competitors.

On the other hand, the critic of state intervention urges the danger of crippling production, of so hampering initiative that progress will cease and the output of goods, from which, in the last resort, wages are paid, will be reduced. Even where conditions are deplorable and cry for remedy, it does not follow that the intervention of the state is the only or the wisest means of providing that remedy. The end urged by the advocate of stale intervention may be right, but the means he urges may be wrong. We sometimes speak of the State as if it were an all-wise and infallible over-providence, free from the limitations and the weaknesses of individual men In reality, the state means the government, and women. means the fleeting, vote-seeking politician and the red-tapebound bureaucrat, each with his full measure of human weakness as to motive and capacity, and often out of touch with the quickly changing conditions and needs of the industry with which he meddles. The possibility of workers aiding themselves is underestimated. In new countries especially, where in normal times labor is at a premium, the individual workman and still more the organized union may, and do, secure rapid and almost constant improvement. True, to speak of the young child's freedom to contract with the employer is a mockery, and there are intricate questions with which even the adult man or woman cannot well deal. But there is need for discrimination, for actual study as to whether the worker concerned is or may become able to help himself. The conclusion that children of ten should not be permitted to work in a factory by no means involves a belief that the state should fix the wages paid to an adult. Wherever self-help is possible it is infinitely preferable, not only as a more flexible instrument than the rigid, uniform state rule, but because of the value of the effort, the effect upon character of struggle and responsibility. The paternalist state may have strictly regulated factories, elaborate organization of industry, may watch over each citizen from the cradle to the grave and safeguard him from this harm or that, but the penalty will be paid in the loss of freedom, of energy, of self-reliance and

self-control.

It is clear that there is force in each of these positions. We cannot well take up either of the extreme and doctrinaire positions that the state should intervene wherever an evil is found, or that the state should not intervene at all. The existence of the evil in each case, its magnitude, the question whether it is passing away or increasing, should first be determined by impartial investigation, not by the rhetorical exaggeration of demagogues or the interested denials those who reap the profits from its continuance. Once the reality and extent of the evil is made clear, the question should next be considered whether, unaided by the state, the individual workman or the organized union, the influence of public opinion or the efforts of the more progressive employers, especially when organized in associations and federations, cannot provide a remedy. Certainly, if a man can help himself, the results on individual and national life and character are preferable to those found in the over-policed and drill-sergeanted states.

If, however, no such remedy is possible, if only the state can rise to the occasion, there seems no reason why that intervention should be resisted on doctrinaire grounds, or merely because state intervention in some other matter is not advisable. The state is merely the collective will, not an alien body. Though governments are fallible, and state administration is often rigid where it should be flexible and lax where it should be f .. , yet administrative machinery is improving and can more and more grip adequately with the problems set. The intervention of the state may increase competition rather than lessen it, merely raising the plane upon which competition is carried on, providing, for example, that manufacturers must compete, not in callous disregard of childhood's weaknesses and wants and possibilities, but in efficiency of organization, in alertness to adopt new methods, in judgment as to the rise and fall of the markets they buy in and sell in. Granting, however, that intervention is necessary, and may be beneficial. it still remains to inquire what form this intervention should take, whether it should take the form of aid which will help the workman further to help himself, or whether it will be remedial rather than preventive, dealing with symptoms rather than with the root causes of the difficulty.

The state is taking an increasing but hotlydebated share in the regulation of labor conditions. By some extremists all intervention by the state is opposed as coddling that injures the workman, or as meddling that injures the employer. By extremists of the opposite type the state is called upon to redress every grievance under the sun. Neither doctrinaire attitude can be maintained in face of a study of the facts of modern life. Granted that, for the sake of developing individual initiative and self-reliance, the state should not intervene where individual or co-operative action will suffice. still, where self-help is not possible the case for intervention is increasingly strong. There is need for discrimination to determine when aid must be given, and what method is likely to strengthen rather than to undermine individual responsibility and self-reliance.

State Intervention outside of Working Relations.

First may be noted the wide range of state activity in matters which lie outside the factory or shop. Such activities affect all classes of the community, but may best be consid-

ered in this connection.

Most extensive and perhaps most helpful is the state's part in education. In nearly all the western world, it not merely makes attendance at school compulsory up to a varying age, but provides the schools, usually, so far as primary instruction is concerned, without any cost to the parents, other than their share of the load of taxation. Doubtless in many cases this education is misdirected, preparing children as if all were likely to enter one of the professions, and not giving the training required by those who will spend their lives in business or in a trade or on the farm. Employers and governments alike are being awakened to the need of better-trained workmen, and, since the apprenticeship system is no longer feasible in its old form, they are pressing to have the schools undertake this training. So, too, the belief that the country school, having a curriculum identical with that of city schools, has been a great factor in the cityward drift of young country folk, leads to a demand for a training more closely adapted to the needs of those who are to live their life on the farm, and more apt to interest them in country problems. Yet unduly early specializing is not desirable, and vocational education should not be carried on to the exclusion of general cultural training, giving a glimpse of the world of life and thought outside of the occupation and the community wherein the future years are likely to be spent. Whatever modifications be made in these directions, it is true, and should be made increasingly true, that free and compulsory school training is the most fundamental form of aid the state can give, aiding the child to help himself, and making it easier for ability in any walk of life to get a start. We cannot give all men equal capacity, but we can, by wisely directed education, assure a wide measure of equality of opportunity.

The provision of recreation facilities has come more recently and is as yet less universal. The need of park and playground for the physical welfare of the young, and to give a wholesome outlet to their energy and inventiveness, is, however, now widely felt and widely net. In our crowded cities it is not possible for the individual to provide these facilities for himself and his family, so perforce the state must undertake them. Possibly if the garden city and garden suburb movement spreads, the cities of the future will have greater recreation facilities from the outset, in private, association and com-

munal forms.

Housing conditions are equally fundamental. Recent experience in Canada has shown how rapidly old world slums may reproduce themselves in this new land, especially in those towns and cities into which our foreign immigrants have poured, or been dumped. Land speculation, high labor cost, disappearing forests, make building more and more expensive, and lack of any communal forethought permits once decent quarters of the city to degenerate into overcrowded and dirty lodging-houses, and acres of shack towns to spring up on the The dangers to health and morality from such overcrowding, the difficulty of developing strength of body or of mind, are now clearly recognized, though not always combatted. The intervention of the state is, of course, not the only means by which housing conditions may be bettered. Such experiments as those at Bourneville or Port Sunlight, while they affect only a small fraction of the people of a country. have a widespread influence in shaping hopes and tastes. Improvements in transport that vermit wide spreading out, building and loan associations which aid the man of small means in obtaining a home of his own, the diffusion of architectural knowledge, all make for betterment. The state, however, also has its part to play. Most effective is its negative or regulative work, the building code it draws up and sometimes enforces. Laws limiting the number of stories or the total height of buildings in various sections, regulating the proportion of a lot that may be built upon, providing for windows in every room, ensuing safety against fire by barring certain materials or methods of construction, and providing for inspection to secure a minimum of sanitary decency, have been badly needed in all the great cities, and are rapidly being put in force. More local and scattered have been the positive efforts of the state, the provision of model dwellings, as has been done by many British towns, or the municipal guarantee of the bonds of private housing companies, as authorized in Ontario.

Going to the root of the matter is the action of the state which aims at ensuring for every child born within its borders a training adequate alike for living and for making a living, and a home environment which will make strong bodies and alert minds. There is room for much discussion and experiment as to what adequate education and good housing involve, and the means by which they can best be secured, but the modern state is now committed to undertaking the training and regulating the housing of its people so far as necessary to supplement private effort in securing the minimum standards which the awakened social conscience demands.

Regulation of Working Surroundings.

Turning to the activities of the state which have to do with the control of working conditions and relations, it is necessary to glance briefly at the developments in England, where both the factory system and its regulation had their origin. Strict regulation of labor had been customary in England for centuries before the industrial revolution. These laws were mainly in the interes i employers; hours, wages, the number of apprentices were regulated by statute or by justices of the peace or other officials; the passing of poorer laborers from one county to another was made difficult and combinations to secure better wages were forbidden. Gradually this old system of regulation fell into disuse, employers preferring to be unhampered by any rules. An Elizabethan statute, the Statute of Apprenticeship, provided that no one should work in certain trades as journeymen until after an apprenticeship of seven years. Under this act the custom of apprenticing pauper children by parish officials grew up. After the invention of the new machinery in the eighteenth century, the cotton mills of the north called for large numbers of children, more than their own neighborhoods, near water-powers, could furnish; the agricultural districts, where the poor law system in force threw on the parish the support of great numbers of adults and children both, had children to spars. So they were taken to the north, housed in sheds adjoining the factories, and worked from five in the morning at at night from March to September, and from "he spring of the day until the night closed in" for the rest of the year. The terrible abuses which developed under this system shocked even callous early nineteenth century England. "Day and night," writes the biographer of the man who did most to reform factory conditions in England, Lord Shaftesbury, "the machinery was kept going, one gang of children working it by day and another set by night, while, in times of pressure, the same children were kept working day and night by remorseless task-masters." In 1802 Sir Robert Peel (father of the more famous Sir Robert), himself a wealthy manufacturer, placed upon the statute book the first factory law passed in Europe. It dealt only with apprentice children, limiting work to twelve hours a day, and requiring the employer to clothe them decently and provide a minimum of education.

This act was only the forerunner of a continuous series of regulations, adopted as growing evils, increasing knowledge or increasing sympathy inspired fresh action. The conditions existing where the pauper apprentice children were employed were soon reproduced in the case of children living at home and of women as well. Walker thus summarizes the condition of affairs: "The beginning of the nineteenth century found children of five and even of three years of age working in factories and brickyards; women working underground in mines, harnessed with mules to carts, drawing heavy loads: found the hours of labor whatever the avarice of individual mill-owners might exact, were it thirteen, or fourteen, or fifteen: found no guards about machinery to protect life and limb: found the air of the factory fouler than language can describe, even could human ears bear to hear the story." Step by step these conditions were met by ever more sweeping laws. For many years they were very imperfectly enforced, but gradually the administrative machinery was tightened up, and inspectors of character and weight saw to their execution.

It should not be imagined that the factory system was responsible for all the misery and callous cruelty which investigation after investigation revealed. Rather, the factory system brought the treatment of children into the light of day; many abuses which had gone on unquestioned in the privacy of the home or the small workshop became flagrant and notorious when hundreds were brought together. So to-day the greatest misery is not found in the industrial countries, where loudest criticism of existing evils is heard, but in the backward states of eastern Europe and of Asia, where misery and penury

are accepted as inevitable fate and gross evils receive little

publicity.

From England factory laws spread with the factory system itself. Some countries were able to profit by her experience, averting the worst evils she had experienced. Others, notably the southern states of the United States, repeated the same blunders nearly a century later, and only within the past decade has the disgraceful exploitation of children of from eight to twelve ceased or lessened in many of the new cotton-manufacturing sections of those communities. In Canada nearly the whole field of legislation upon factory and labor conditions is assigned to the provinces, so that there is no uniformity of regulations or of administration. Most of the provinces, however, are among the more advanced states in their laws, though not so efficient as European countries in the execution of the laws.

First may be considered the laws regulating working surroundings. Provisions are enacted to secure health and decency. Ventilation is usually insisted upon, and often it is provided that there should be a certain number of cubic feet per worker. Exhaust fans may be required to carry off poisonous gases or dust from grindstones or emery wheels. Toilet facilities must be provided. In stores, seats for women em-

ployees are often insisted upon.



